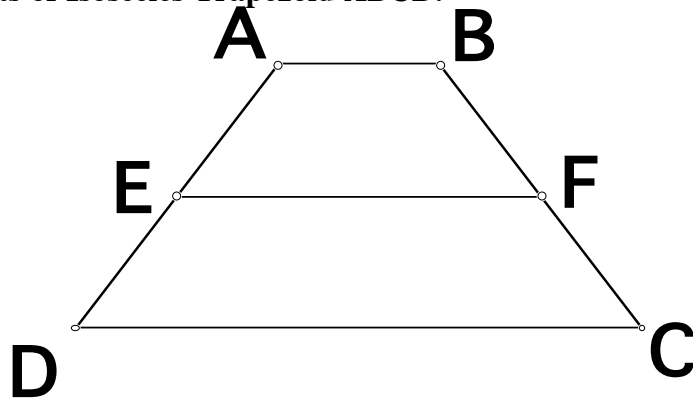


Chapter 6: Quadrilaterals  
 Lesson 6-5: Trapezoids and Kites  
 Homework

Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Period: \_\_\_\_\_

**1. Find the missing measurements of Isosceles Trapezoid ABCD.**

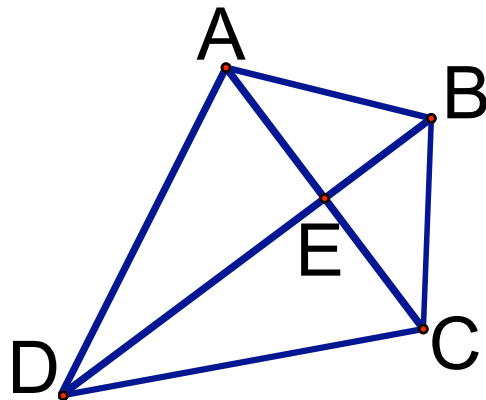
AB = 13  
 EF = \_\_\_\_\_  
 DC = 19  
 AE = \_\_\_\_\_  
 ED = \_\_\_\_\_  
 AD = \_\_\_\_\_  
 BF = \_\_\_\_\_  
 FC = 5.5  
 BC = \_\_\_\_\_



$m\angle EAB =$  \_\_\_\_\_     $m\angle ABF = 123^\circ$      $m\angle BFE =$  \_\_\_\_\_     $m\angle EFC =$  \_\_\_\_\_  
 $m\angle FCD =$  \_\_\_\_\_     $m\angle CDE =$  \_\_\_\_\_     $m\angle DEF =$  \_\_\_\_\_     $m\angle FEA =$  \_\_\_\_\_

**2. Find the missing measurements of Kite ABCD.**

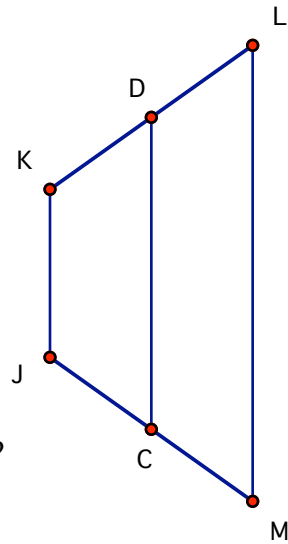
AB = 8  
 BC = \_\_\_\_\_  
 CD = \_\_\_\_\_  
 DA = 14  
 AC = \_\_\_\_\_  
 DB = \_\_\_\_\_  
 AE = 6  
 BE = 5  
 CE = \_\_\_\_\_  
 DE = 12



$m\angle ABE =$  \_\_\_\_\_     $m\angle EBC =$  \_\_\_\_\_     $m\angle BCE =$  \_\_\_\_\_     $m\angle ECD =$  \_\_\_\_\_  
 $m\angle CDE =$  \_\_\_\_\_     $m\angle EDA =$  \_\_\_\_\_     $m\angle DAE = 63^\circ$      $m\angle EAB = 39^\circ$   
 $m\angle AEB =$  \_\_\_\_\_     $m\angle BEC =$  \_\_\_\_\_     $m\angle CED =$  \_\_\_\_\_     $m\angle DEA =$  \_\_\_\_\_

**JKLM is an isosceles trapezoid. Use the given information to solve each problem.**

3. Find DC if  $JK=9$  and  $LM=18$ .
4. Find JK if  $CD=23$  and  $LM=30$ .
5. Find  $m\angle JKD$ , if  $m\angle KDC = 47$ .
6. Find  $m\angle L$  if  $m\angle KJC = 111$ .
7. What is the value of  $x$  if  $KL=144$ , and  $DL = 2x$ ?
8. What is the value of  $x$  if  $m\angle K = 115$  and  $m\angle L = 3x + 26$ ?
9. What is the value of  $x$  if  $m\angle J = 5x - 12$  and  $m\angle DCM = x + 26$ ?
10. What is the value of  $x$  if  $JK=2x-4$ ,  $LM=4x+8$ , and  $CD=53$ ?



**PQRS is a kite. Use the given information to solve each problem.**

11. Find  $m\angle TRS$  if  $m\angle RST$  is  $65^\circ$ .
12. Find  $m\angle PQR$  if  $m\angle PST = 72$  and  $m\angle TSR = 19$ .
13. What is the value of  $x$  if  $QR=14x-7$  and  $RS = 7x$ ?
14. What is the value of  $x$  if  $PQ+QR = 58$  and  $RS+SP = 23x - 189$ ?
15. What is the value of  $x$  if  $m\angle PQT = 4x - 3$ ,  $m\angle TQR = x + 8$ , and  $m\angle PSR = 149$ ?

